

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Withdrawn) A method, comprising:
providing an optical imaging module to project a patterned radiation beam to a photoresist layer during a lithographic process; and
filling an immersion liquid comprising a polymer or oligomer between an output surface of the optical imaging module and the photoresist layer to transmit the patterned radiation beam from the optical imaging module to the photoresist layer.
2. (Withdrawn) The method as in claim 1, wherein the immersion liquid further comprises silicon.
3. (Withdrawn) The method as in claim 1, wherein the immersion liquid comprises $[-\text{Si}(\text{CH}_3)_2\text{-O-Si}(\text{CH}_3)_2\text{-O-}]_x$, where x is a positive integer number.
4. (Withdrawn) The method as in claim 1, wherein the immersion liquid comprises $[-\text{Si}(\text{CH}_3)_2\text{-O-Si}(\text{CH}_3)_2\text{-O-}]_x$ -Poly(*t*Butoxyl Acrylate) $_y$ where y is between 3 and 5.
5. (Withdrawn) The method as in claim 1, wherein the immersion liquid exhibits a lubricating property.
6. (Withdrawn) The method as in claim 1, wherein the immersion liquid is hydrophobic.
7. (Withdrawn) The method as in claim 1, wherein the immersion liquid does not interact with the photoresist layer.

8. (Withdrawn) A material for an immersion liquid of an immersion photolithographic system, comprising a polymer which comprises silicon.

9. (Withdrawn) The material as in claim 8, wherein the polymer comprises silicon.

10. (Withdrawn) The material as in claim 8, wherein the polymer comprises $[-\text{Si}(\text{CH}_3)_2\text{-O-Si}(\text{CH}_3)_2\text{-O-}]_x$, where x is a positive integer number.

11. (Withdrawn) The material as in claim 8, wherein the polymer comprises $[-\text{Si}(\text{CH}_3)_2\text{-O-Si}(\text{CH}_3)_2\text{-O-}]_x\text{-Poly}(\text{tButoxyl Acrylate})_y$ where x and y are integers.

12. (Withdrawn) The material as in claim 1, wherein the polymer exhibits a lubricating property.

13. (Withdrawn) The material as in claim 8, wherein the polymer is hydrophobic.

14. (Withdrawn) The material as in claim 1, wherein the polymer does not interact with the photoresist layer.

15. **(Currently Amended)** A system, comprising:
an optical illumination module to project an illumination beam;
a mask located in a path of the illumination beam and having an optical pattern to superimpose the optical pattern on the illumination beam;
an optical imaging module located to receive the patterned illumination beam and to focus the patterned illumination beam

to **[[a]]** an imaging plane;

a wafer stage to hold a wafer at the imaging plane; and
an immersion liquid comprising a siloxane polymer and
filled between the wafer and the optical imaging module to
transmit the patterned illumination beam to the wafer.

16. Canceled.

17. (Original) The system as in claim 15, wherein the
polymer comprises $[-\text{Si}(\text{CH}_3)_2\text{-O-Si}(\text{CH}_3)_2\text{-O-}]_x$, where x is a
positive integer number.

18. (Original) The system as in claim 15, wherein the
polymer comprises $[-\text{Si}(\text{CH}_3)_2\text{-O-Si}(\text{CH}_3)_2\text{-O-}]_x\text{-Poly}(\text{tButoxyl}$
Acrylate) $_y$ where x and y are integers.

19. (Withdrawn) An immersion liquid for an immersion
photolithography system, comprising:
water; and
an additive added to the water and comprising a surfactant.

20. (Withdrawn) The liquid as in claim 19, wherein the
surfactant comprises a moiety that has carbon or silicon.

21. (Withdrawn) An immersion liquid for an immersion
photolithography system, comprising:
water; and
an additive added to the water and comprising a photo acid
generator.

22. (Withdrawn) The liquid as in claim 21, wherein the
photo acid generator comprises an aryl.

23. (Withdrawn) An immersion liquid for an immersion photolithography system, comprising:

water; and

an additive added to the water and comprising a base.

24. (Withdrawn) The liquid as in claim 23, wherein the base comprises alkyl.

25. (Withdrawn) An immersion liquid for an immersion photolithography system, comprising:

water; and

an additive added to the water and comprising a buffer.

26. (Withdrawn) The liquid as in claim 25, wherein the buffer comprises a mixture of a salt and an acid.

27. (Withdrawn) An immersion liquid for an immersion photolithography system, comprising:

water; and

an additive added to the water and comprising a salt.

28. (Withdrawn) The liquid as in claim 27, wherein the salt is an ammonium salt.

29. (Withdrawn) An immersion liquid for an immersion photolithography system, comprising:

water; and

an additive added to the water and comprising a plasticizer.

30. (Withdrawn) The liquid as in claim 29, wherein the plasticizer comprises a moiety that comprises carbon or silicon.